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| EXAMINER | |
|---|---|
| KAU, STEVEN Y | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/635,819 | REESE ET AL. | |
| | Examiner | Art Unit | |
| | Steven Kau | 2625 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *10 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) *21-45* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/6/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group I (species shown in Figs. 1, 2 & 3) in the reply filed on July 10, 2007 is acknowledged. Applicant argues that claims 17-20 should belong to species I because "claim 6 is not mutually exclusive to claims 17-20 of Species 2. In particular, Applicant notes that the limitations of independent method claim 6 are incorporated in the computer-readable instructions stored on the computer usable medium of claim 17. Therefore, in accordance with MPEP § 806.04(f), Applicant contends that it is also entitled to examination of these claims as their restriction from the claims of Species 1 is improper" (Lines 7-11, Page 3, Response to Election/Restriction, dated July 10, 2007). Applicant's argument is persuasive; therefore, claims 17-20 are combined with Species I (claims 1-16) for application prosecution.

The requirement is still deemed proper and is therefore made FINAL.

Accordingly, claims 21-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim.

Thus, claims 1-20 will be further examined in this action.

### *Information Disclosure Statement*

2. The information disclosure statement (IDS) submitted on 8/6/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 6, 12 and 17 are rejected under 35 U.S.C. 112, first paragraph, because these claims are "Single Means Claim". A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor. See MPEP 2164.08(a).

### *Claim Rejections - 35 USC § 101*

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-5 and 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows:

Claims 1-5 define an "image database" with functional descriptive material. While functional descriptive material may be claimed as a statutory product (i.e., a "manufacture") when embodied on a tangible computer readable medium, a "database" per se does not fall within any of the four statutory classes of 35 U.S.C. §101. A "database" is not a process because it is not a series of steps per se. Furthermore, a "database" is not a "machine", "composition of matter" or a "manufacture" because these statutory classes "relate to structural entities and can be grouped as 'product' claims in order to contrast them with process claims." (1 D. Chisum, Patents § 1.02 (1994)). Machines, manufactures and compositions of matter are embodied by physical structures or material, whereas a "database" has neither a physical structure nor a tangible material. That is, a "database" is not a "machine" because it has no physical structure, and does not perform any useful, concrete and tangible result. Likewise, a "database" is not a "composition of matter" because it is not "matter", but rather a form of energy. Finally, a "database" is not a "manufacture" because all traditional definitions of a "manufacture" have required some form of physical structure, which a claimed signal does not have.

Claims 17-20 define a "computer-usable medium" which "having computer-readable instructions stored" {interpretation: a "computer-usable medium" can be a piece of paper and it can be read by a printer or a scanner, and "having computer-readable instructions stored" is interpreted as instruction can be read by a computer and

stored in a computer, but no further steps to be executed to produce or generate any useful, tangible and concrete thing}. In addition, the claim only selects an image and/or two layer or more layers of metadata, but not to generate or produce any useful, concrete and tangible result. Therefore, a "computer-usable medium" per se does not fall within any of the four statutory classes of 35 U.S.C. §101 as discussed in the rejection of claims 1-5.

> A "manufacture" is defined as "the production of articles for use from raw materials or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery." Diamond v. Chakrabarty, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting American Fruit Growers, Inc. v. Brogdex Co., 283 U.S. 1, 11, 8 USPQ 131, 133 (1931).

Therefore, a "database" and a "computer-usable medium" are considered non-statutory because it is a form of energy, in the absence of any physical structure or tangible material, that does not fall within any of the four statutory classes of 35 U.S.C. §101.

### *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (Davis) (US 2002/0001395) in view of LeMole et al (LeMole) (US 6,009,410).

With regard to claim 1, Davis discloses an authentic metadata, in that he anticipates an image database {e.g. an image library, metatdata database, or an image database} (Figure 3, Par 0089), comprising: a database (Figure 1, col 5, lines 37-42), each image having a plurality of associated layers of metadata (Par 0196).

Davis differs from With regard to claim 1, in that he does not teach a database of one or more advertising images.

LeMole discloses a method and a system, in that he teaches a database of one or more advertising images {e.g. a customized advertising repository server must stores advertising images} (col 1, lines 57-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Davis to include a database of one or more advertising images taught by LeMole to promote business opportunity to consumers (col 2, lines 47-55).

With regard to claim 2, Davis teaches the database is adapted to associate the layers of metadata with each image dynamically {e.g. user can specify data type, friendly user interface, powerful application for searching metadata across different imaging application, etc} (Par. 0028, 0151 & 0196).

With regard to claim 3, Davis differs from claim 3, in that he does not teach the layers of metadata with one or more images in response to one of a user ID of the image requester, a location input, a business relationship characteristic of the image requester, a promotion type input, and a language input.

LeMole teaches the layers of metadata with one or more images in response to one of a user ID of the image requester, a location input, a business relationship characteristic of the image requester, a promotion type input, and a language input {e.g. commercial advertising must include business relationship, promotion and language input; a URL address identifies a location input, customized advertising must include a user ID of the image for advertising} (col 1, lines 57-67, col 2, lines 1-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Davis to include layers of metadata with one or more images in response to one of a user ID of the image requester, a location input, a business relationship characteristic of the image requester, a promotion type input, and a language input taught by LeMole to promote business opportunity to consumers (col 2, lines 47-55).

With regard to claim 4, Davis teaches the database is adapted to selectively update the images and/or associated layers of metadata in response to vendor input {e.g. vendor transaction, service providing, etc.} (Par. 0174).

With regard to claim 5, Davis teaches the database is adapted to search the images and/or associated layers of metadata in response to one of a query input by a user, a user ID of the image requester, a location, a business relationship, a promotion type, and a language input (Par. 0151).

9. Claims 6-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeMole et al (LeMole) (US 6,009,410) in view of Davis et al (Davis) (US 2002/0001395).

With regard to claim 6, LeMole teaches a method of operating a database of advertising images (Figures 1 & 2, col 1, lines 57-65) comprising: selecting an advertising image {e.g. customized advertising must select an advertising image} (col 1, lines 57-65).

LeMole differs from claim 6, in that he does not teach selecting two or more layers of metadata associated with the selected image.

Davis teaches selecting two or more layers of metadata associated with the selected image {e.g. metadata includes sound, text, video, graphic, photo, etc.} (Par. 0196).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more layers of metadata associated with the selected image taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 7, LeMole teaches selecting an advertising image in response to a query by one of an advertiser and a publisher {e.g. a user (publisher or advertiser) can retrieve images from an advertising repository dynamically} (col 3, lines 66-67 & col 4, lines 1-35).

With regard to claim 8, LeMole differs from claim 7, in that he does not teach selecting two or more pre-generated layers of metadata associated with the selected image.

Davis teaches selecting two or more pre-generated layers of metadata associated with the selected image {e.g. metadata of media signals such as {e.g. pre-

generated layers include session identifier, which can be a number or message embedded steganographically in the image or metadata} (Par. 0071).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more pre-generated layers of metadata associated with the selected image taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 9, LeMole differs from claim 9, in that he does not teach selecting two or more dynamically generated layers of metadata.

Davis teaches selecting two or more dynamically generated layers of metadata {e.g. processing the embedded metadata} (Par. 0036).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more dynamically generated layers of metadata taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 10, LeMole teach selecting two or more dynamically generated layers of metadata utilizing one of a user ID of an image requestor, a location input, a business relationship characteristic of an image requester, a promotion type, and a language type {e.g. commercial advertising must include business relationship, promotion and language input; a URL address identifies a location input, customized advertising must include a user ID of the image for advertising} (col 1, lines 57-67, col 2, lines 1-46).

With regard to claim 11, LeMole teaches updating the selected advertising image and two or more layers of metadata in the database utilizing input from a vendor (col 2, lines 47-55).

With regard to claim 12, LeMole teaches selecting an advertising image (col 2, lines 47-55 & col 6, lines 2-8).

LeMole differs from claim 12, in that he does not teach two or more layers of metadata associated with the selected image from the advertising image repository.

Davis teaches two or more layers of metadata associated with the selected image from the advertising image repository (Par 0071).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include two or more layers of metadata associated with the selected image from the advertising image repository taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 13, LeMole teaches selecting an advertising image (col 2, lines 47-55 & col 6, lines 2-8).

LeMole differs from claim 13, in that he does not teach two or more layers of pre-generated metadata associated with the selected image from the advertising image repository.

Davis teaches two or more layers of pre-generated metadata associated with the selected image from the advertising image repository {e.g. metadata of media signals

such as {e.g. pre-generated layers includes session identifier, which can be a number or message embedded steganographically in the image or metadata} (Par. 0071).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more pre-generated layers of metadata associated with the selected image taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 14, LeMole teaches selecting an advertising image (col 2, lines 47-55 & col 6, lines 2-8).

LeMole differs from claim 14, in that he does not teach two or more layers of dynamically generated metadata associated with the selected image from the advertising image repository.

Davis teaches two or more layers of dynamically generated metadata associated with the selected image from the advertising image repository {e.g. processing the embedded metadata} (Par. 0036).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more dynamically generated layers of metadata taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 15, LeMole teaches utilizing one of a user ID of an image requester, a location input, a business relationship characteristic of an advertiser, a promotion type, and a selected language {e.g. commercial advertising must include

business relationship, promotion and language input; a URL address identifies a location input, customized advertising must include a user ID of the image for advertising} (col 1, lines 57-67, col 2, lines 1-46).

LeMole differs from claim 15, in that he does not teach selecting two or more dynamically generated layers of metadata.

Davis teaches selecting two or more dynamically generated layers of metadata (0071).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more dynamically generated layers of metadata taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 16, LeMole teaches updating the selected advertising image (col 2, lines 47-55).

LeMole differs from claim 16, in that he does not teach selecting two or more layers of metadata in the advertising image repository utilizing a changed image or metadata from a vendor.

Davis teaches selecting two or more layers of metadata in the advertising image repository utilizing a changed image or metadata from a vendor (Par. 0174).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more layers of metadata in the advertising image repository utilizing a changed image or metadata

from a vendor taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 17, LeMole teaches a computer-usable medium having computer-readable instructions stored thereon for execution by a processor to perform a method {e.g. an new computer magazine, an on-line computer hardware and/or software} (col 5, lines 10-16) comprising: selecting an advertising image from a repository (col 2, lines 47-55 & col 6, lines 2-8).

LeMole differs from claim 17, in that he does not teach selecting two or more layers of metadata associated with the selected image from the repository.

Davis teaches selecting two or more layers of metadata associated with the selected image from the repository {e.g. editing a metadata associated with an image} (Par. 0157).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified LeMole to include selecting two or more layers of metadata associated with the selected image from the repository taught by Davis because selected data can be embedded becoming more sophisticated forms of authentication (Par. 0102).

With regard to claim 18, LeMole teaches selecting an advertising image from a database (col 2, lines 47-55 & col 6, lines 2-8).

With regard to claim 19, the structure elements of method claim 8 perform all steps of computer-usable medium claim 19. Thus claim 19 is rejected under 103(a) for the same reason discussed in the rejection of claim 8.

With regard to claim 20, the structure elements of method claim 9 perform all steps of computer-usable medium claim 20. Thus claim 20 is rejected under 103(a) for the same reason discussed in the rejection of claim 9.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Kau whose telephone number is 571-270-1120 and fax number is 571-270-2120. The examiner can normally be reached on M-F, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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